

REMARKSI. Introduction

In response to the Office Action dated August 20, 2007, claims 47-48 have been amended. Claims 1-48 remain in the application. Re-examination and re-consideration of the application, as amended, is requested.

II. Prior Art Rejections

On pages 2-9 of the Office Action, claims 1-12 and 45-46 were rejected under 35 U.S.C. §103(a) as being unpatentable over Raïke et al. (US 2002/0162104 A1) in view of Son et al. (US 2001/0017920A1) ("Son") and in further view of Akiyama (US 2002/0001386).

On page 10 of the Office Action, claims 47 and 48 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Raïke in view of Son and Akiyama and further in view of Loisel (US 2003/0026428).

On pages 11-19 of the Office Action, claims 13-44 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Raïke in view of Loisel, Son, and Akiyama.

Applicant respectfully disagrees with and traverses the above rejections for at least one or more of the following reasons:

(1) Neither Raïke, Son, Akiyama, nor Loisel teach, disclose, or suggest a single host receiver that is configured to perform multiple specifically claimed activities including decrypting and re-encrypting a media encryption key, transferring a re-encrypted media key to a client, receiving encrypted program materials that have been broadcast, and transferring received broadcast materials to a client;

(2) Neither Raïke, Son, Akiyama, nor Loisel teach, disclose, or suggest a client receiver that does not have a CAM that is configured to perform multiple specifically claimed limitations including decrypting a re-encrypted media encryption key and decrypting received program materials using the decrypted media encryption key; and

(3) Raïke teaches away from the presently claimed invention.

The independent claims are generally directed to distributing content throughout a household network using a host IRD that receives the broadcast content via satellite and relays it for display by trusted light weight client boxes. More specifically, in claims 1 and 7, the claims provide

for receiving and decrypting an encrypted media encryption key at a host receiver. The decrypted key is then re-encrypted by the host receiver using a pairing key. The re-encrypted key is transmitted from the host to the client. The claims specifically recite that the client does not utilize a conditional access module (CAM). Thus, the client receiver is a light-weight box. Thereafter, the client decrypts the key using the pairing key. The host then receives encrypted program material (that has been broadcast) and transfers the material to the client receiver. The client receiver decrypts the encrypted program materials using the decrypted media encryption key.

Similar to claims 1 and 7, claims 13 and 22 claim very similar limitations but further provide for the host receiver to use a conditional access module (CAM). In this regard, the first portion of claims 13 and 22 provide for the synchronization between the CAM and the host. The second part transmits the materials and keys to the client.

Similar to claims 1, 7, 13, and 22, claims 31 and 38 first synchronize the CAM on the host with the client receiver and then send program materials from the host to the client.

One unique aspect about all of the claims is that the client is a light-weight client and does not utilize a CAM. Further, as recited in the amended dependent claims 43-48, the light-weight client also lacks a tuner and explicitly provides that the host utilizes a CAM.

In rejecting claims 1 and 7, the Office Action primarily relies on Raike. Specifically, the Action equates the claimed client receiver to Raike's consumers or end-users through the use of client devices. The Action further equates the claimed host receiver to Raike's retail server. For such a rejection to establish a prima facie case of nonobviousness, Raike's client devices and retail server must perform the functionalities of the client device and host receiver respectively. Thus, Raike's retail server must be able to receive an encrypted media encryption key, decrypt the media encryption key, re-encrypt the decrypted media encryption key and forward/transfer the re-encrypted key to the client receiver. In addition, Raike's retail server must also receive encrypted program materials and transfer it to a client receiver.

However, contrary to that set forth in the Office Action, Raike completely and entirely fails to disclose such capabilities. Instead, Raike actually teaches away from having a single retail server perform such multiple functions. In fact, multiple different paragraphs of Raike explicitly teach away from such a single retail server performing the multiple functions. Applicants direct the attention of the Patent Office to paragraph [0037] which provides:

...It is part of the invention that the encrypted content is made available separately from the encryption keys or access rights and these rights or keys are purchased or otherwise acquired by consumers from an entity who holds neither media or keys. Additionally security is maximised if all three functions are managed by separate entities from separate server sites.

Similarly, paragraph [0039] provides:

...To best secure the media it is important for the key server and media server to be managed by separate entities.

Thus, as can be clearly seen, Raiké explicitly and expressly provides for using multiple different servers and requires that the key server be separate from the media server. Further, Raiké explicitly requires that the key functionality is managed by separate entities from separate server sites. Such a teaching serves to explicitly teach away from the presently claimed invention which expressly requires that the host receiver perform both functions. Thus, Raiké should not and cannot be used to reject the portions of the claim upon which it is relied for.

The Action acknowledges Raiké's lack of disclosure with respect to the decryption and re-encryption of the media encryption key (see Page 3 of the Action). However, as described above, in addition to failing to teach such elements, Raiké actually teaches away from a single server that both receives the media AND performs encryption services relating to the media encryption key.

The Action ignores this combined functionality of the claimed host receiver and combines multiple different references. Again, since Raiké teaches away from such functionality, even combining Raiké with another reference would still fail to render the claimed invention obvious.

To teach the decrypting/re-encrypting functionality of the claimed host receiver, the Office Action relies on Son. Applicants note that Son fails to teach, describe, or suggest, explicitly or implicitly, the use of a light-weight client receiver. More specifically, Son does not hint at or remotely allude to the use of a client box that does not have nor utilize a conditional access module (CAM). Instead, Son is directed towards video-on-demand distribution networks (see paragraph [0007]) and a standard distribution network which is commonly known to include and utilize conditional access modules (CAMs).

In rejecting these claim elements, the Action asserts that since Son discloses decrypting and re-encrypting a video program, it teaches the decrypting and re-encrypting of a key since any data can be decrypted and re-encrypted. Applicants respectfully disagree with and traverse such an assertion. In this regard, the claims explicitly provide for a process that utilizes specific keys for specific functions. Further, the claims provide for decrypting and re-encrypting a media key that is

then used to decrypt actual media content. To assert that the media content is equivalent to such a key is wholly without merit and illogical. Further, contrary to that asserted in the Action, one of ordinary skill in the art would not compare a program that is being encrypted to encrypting a key that is used to decrypt such a program. Again, it is not only illogical but disingenuous to make such an assertion.

Lastly, the Action acknowledges that Raiké and Son both fail to disclose the use of a pairing key for content between a host receiver and a client receiver. Instead, the Action relies on Akiyama (paragraphs [0099] and [0100]) for such a teaching. Applicants note that paragraph [0099] recites that each receiver apparatus has a master key which is used to encrypt a channel key. Also of note is that Akiyama's receiver apparatus is within the prior art devices in that they all receive direct broadcasts and therefore include a broadcast wave receiver 111 (see FIG. 1) and include IC cards (e.g., see paragraphs [0154] and [0262]). Thus, rather than teaching a thin client box or a client receiver box that does not have a CAM yet also has a pairing key to a host receiver, Akiyama merely discloses receiver boxes that receive broadcasts without any host receiver whatsoever. The Action equates Akiyama's broadcast center to the claimed host. However, as can be clearly seen in the claims, the claimed host receives media that is broadcast and forwards/transfers it to the client device. Thus, the host does not have the broadcast functionality or capabilities as is required in Akiyama.

Again, the present invention is unique in that it relates to a thin client box configuration with a host that receives broadcasts and transmits them to one or more client thin boxes. In addition, the media keys necessary to view the programs that were broadcast are managed by the host receiver and encrypted and sent to the thin client boxes. Such capabilities are neither taught nor suggested in any way, shape, or form, explicitly or implicitly, by any of the cited references, either alone or in combination.

Further, the dependent claims more clearly establish that the client receiver does not and cannot receive broadcasts because it does not have a tuner. Further, while the client device does not have a tuner, the host receiver has a conditional access module that is used to receive and manage the programs that the host receives via broadcast.

In addition to the above, Loisel fails to cure the deficiencies of the other cited references. In this regard, the Action relies on Loisel to teach a host receiver using a CAM. However, similar to the limitations of the other cited references, Loisel does not even contemplate a thin client box and

host receiver configuration as set forth in the present claims. In this regard, Loisel fails to disclose a client box that does not have a tuner configured/paired with a host receiver that utilizes a CAM as claimed. Instead, Loisel discloses the use of a smart card which is similar to a CAM as well as a CAM.

Moreover, the various elements of Applicants' claimed invention together provide operational advantages over Raike, Son, Akiyama, and Loisel. In addition, Applicants' invention solves problems not recognized by Raike, Son, Akiyama, and Loisel. In this regard, while the present invention is directed towards the use of lightweight client boxes in a home network, neither Raike, Son, Akiyama, nor Loisel even recognize the use or possible use of a home network or any problems associated with such a network.

Thus, Applicants submit that the independent claims are allowable over Raike, Son, Akiyama, and Loisel. Further, the dependent claims are submitted to be allowable over Raike, Son, Akiyama, and Loisel in the same manner, because they are dependent on the independent claims, and thus contain all the limitations of the independent claims. In addition, the dependent claims recite additional novel elements not shown by Raike, Son, Akiyama, and Loisel.

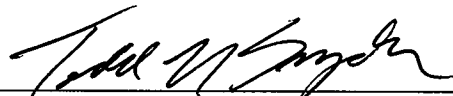
III. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicants' undersigned attorney.

Respectfully submitted,

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